



**TECHNICAL DIVISION
POLICY TD-1170**

**AUTHORIZATION FOR HYDROFLUORIC ACID OPERATION & USAGE
IN THE TECHNICAL DIVISION FACILITIES**

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1.0 Purpose and Scope

The purpose of this policy is to implement consistent tracking of the training and authorization procedure to ensure only qualified Technical Division personnel handle and perform operations with acid mixtures containing hydrogen fluoride (HF) within Technical Division Facilities. More specifically, this policy establishes procedures for conducting and certifying the training for HF handling and usage in the Material Development and Testing Laboratory (MDTL) and in the Industrial Building 4 Cavity Processing Laboratory (IB4/CPL). It also establishes the Line Management responsibilities for final authorization to use HF, known as "individual clearance to operate".

Because HF is an acutely toxic chemical and significant exposures to concentrated HF may progress to fatality if left untreated, the TD Management implements a strict policy of training and authorization for HF "individual clearance to operate" based on line-management authority and responsibility.

The managerial line from bottom to top is established in the following way:

- HF Operator
- HF Facility Manager
- TD Senior Safety Officer (TD SSO)

All training processes are designed according to the following sequence. The training process starts with class-room training provided by the appropriate TD HF Facility Manager, followed by on the job training sessions where the operator in-training will first observe, then assist and finally perform the procedures for which he/she is being trained. Upon completion of the training, the HF Facility Manager will review and assess the training with the TD SSO. Authorization for the HF operator will be by consensus of both the HF Facility Manager and the TD SSO. All training will be documented in the TRAIN database.

Specific operational and authorization procedures can be located at the following link:

<http://tdserver1.fnal.gov/tdweb/qm/OperationProceduresPage.asp>

2.0 Line Management Responsibilities

In the following, the specific responsibilities of the line management during training and HF operations are listed.

2.1 HF Operator

2.1.1 Training Responsibilities

- The HF Operator is responsible for completing all identified HF training, starting with Chemical Hygiene Plan, Globally Harmonized System (GHS) Hazard Communication training, Hydrofluoric Acid Safety, HF First Aid, and following with the class-room and on the job training for the specific tasks and to which he/she has been assigned.

2.1.2 Operational Responsibilities

- The HF Operator will be responsible for following all procedures involved in the particular work under consideration.
- The HF Operator will be responsible for the Personal Protective Equipment (PPE) requirements, warning sign(s) posting, monitoring of HF atmosphere and any other specific procedure that may apply to the facility in which they will be working.
- The HF Operator will be responsible for reporting to the appropriate HF Facility Manager any off normal conditions during the processing.

2.2 HF Facility Manager

2.2.1 Training Responsibilities

- Confirm that the operator has received the Hydrofluoric Acid Worker, Chemical Hygiene, and GHS Hazard Communication training.
- Provide class-room and OJT to HF Operators and HF Operators In-Training.
- Recommend an HF Operator for "clearance to operate".
- Review and improve, if necessary, the training documentation.

2.2.2 Operational Responsibilities

- Ensure that facility use is consistent with all FNAL/TD Environmental, Safety and Health policies.
- Manage, monitor, and log HF acid usage and waste.

2.3 Technical Division Senior Safety Officer

- Ensure entry of all HF training modules in the Fermilab TRAIN database and that individual HF training is up-to-date and current.
- Check HF acid usage log(s).

Revision Number	Date	Changes Made
Rev. 0	4/6/07	Policy initially published
Rev. 1	8/6/14	More than 5 years since initial policy published. Organizational and procedural changes in the Technical Division requires that the policy be revised.